

TECHNICAL MANUAL

MANUAL TITLE	MANUAL NO.	MANUAL ISSUE	PAGE
Low-Level Radioactive Waste Management Operations	MD-81240	36	1 of 8
OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY
Procedure for Rail Shipments to Envirocare	306	8	C
TECHNICALLY RESPONSIBLE	ECN NO.	EFF. DATE	
Randal S. Barr	060001MD	01-30-06	

☒ Denotes change

USE CATEGORY	
C	This procedure shall be available to workers, though not necessarily at the work location. This procedure may be performed without referring to the procedure; however, the user is still responsible for adhering to the procedure.

TABLE OF CONTENTS

1.	PURPOSE-----	3
2.	SCOPE--	3
3.	APPLICABILITY-----	3
4.	SOURCE REQUIREMENT DOCUMENTS-----	3
5.	OTHER-----	3
6.	REFERENCES-----	3
7.	PEREQUISITE ACTIONS-----	4
7.1	Planning, Coordination, and Preparation-----	4
7.2	Performance Documents-----	4
7.3	Tools, Equipment, Parts, and Supplies-----	4

TECHNICAL MANUAL

OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY	MANUAL NO.	PAGE
Procedure for Rail Shipments to Envirocare	306	8	C	MD-81240	2 of 8

8.	PROCEDURE-----	4
8.1	Procedure for Waste Management -----	5
8.1.1	Obtaining Completed Shipment Load Forms -----	5
8.1.2	Curie Content Calculation-----	5
8.1.3	Individual Package Listing (IPL)-----	5
8.1.4	Creating Low-Track Forms -----	5
8.1.5	Create Waybill on NS System-----	5
8.1.6	Waybill-----	6
8.1.7	Placarding Requirements-----	6
8.2	Completing the Shipping Paperwork-----	6
8.3	Notification-----	7

TECHNICAL MANUAL

OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY	MANUAL NO.	PAGE
Procedure for Rail Shipments to Envirocare	306	8	C	MD-81240	3 of 8

1. PURPOSE

This operation defines the activities required to prepare, load, and ship bulk soils to Envirocare of Utah, Inc.

2. SCOPE

This procedure will define or reference all activities required to prepare shipment documentation for rail shipments. This procedure in conjunction with Operation 600 constitutes the basis for certification by trained and qualified personnel for these shipments with respect to DOT and Envirocare WAC compliance.

3. APPLICABILITY

This procedure applies to Waste Management personnel responsible for DOT and Envirocare Waste Acceptance Criteria (WAC) compliance for rail shipments.

4. SOURCE REQUIREMENT DOCUMENTS

- DOE Order 435.1, *Radioactive Waste Management*
- DOE Order 460.1A, *Packaging and Transportation Safety*
- Title 49 CFR 100-185, (Regulations concerning transportation of hazardous materials)
- MD-10346, *Procedure for Discrepancy Evaluation/Corrective Action Report System*

5. OTHER

Rail Staging area operations are performed in accordance with MD81240-Operation 600.

6. REFERENCES

- MD-80036, *Radiological Operations Procedures*

TECHNICAL MANUAL

OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY	MANUAL NO.	PAGE
Procedure for Rail Shipments to Envirocare	306	8	C	MD-81240	4 of 8

7. PEREQUISITE ACTIONS

7.1 Planning, Coordination, and Preparation

Prepare and provide Norfolk Southern Car Order form at least 2 weeks prior to car loading.

7.2 Performance Documents

- Configuration Index N02004
- ML-8654A, *Discrepancy Evaluation/Corrective Action Report* (if applicable)
- EC-0230-SNM, *SNM Exemption Certification*
- EC98096, *5 Working Day Advance Shipment Notification*
- Low-Track Form 540, *Uniform Low-Level Radioactive Waste Manifest Shipping Paper*
- Low-Track Form 541, *Uniform Low-Level Radioactive Waste Manifest Container and Waste Description*
- ML-9620, *Radiological Survey Data Sheet*
- ML-9746B, *On-Site checklist for Gondola Car*
- *Additional Checklist for Level 2 Security for all LLW Rail Shipments*

7.3 Tools, Equipment, Parts, and Supplies

Low-Track Software

Automated Transportation Management System (ATMS) (Optional)

8. PROCEDURE

NOTE: Procedures in this operation may be performed out of sequence.

TECHNICAL MANUAL

OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY	MANUAL NO.	PAGE
Procedure for Rail Shipments to Envirocare	306	8	C	MD-81240	5 of 8

8.1 Procedure for Waste Management

8.1.1 Obtaining Completed Checklist Forms

- [1] Obtain completed form ML-9746B, *On-Site Checklist for Gondola Car* from the Rail Staging Area.
- [2] Obtain completed form titled “*Additional Checklist for Level 2 Security for all LLW Rail Shipments*” from the Rail Staging Area.

8.1.2 Curie Content Calculation

- [1] Calculate curie content per isotope, per rail car using the net waste weight and the curie concentration.
 - [a] The curie concentration is based on sampling and analysis results, if available, or process knowledge. Typically, a spreadsheet is used for this calculation.
 - [b] Reportable quantities are possible with a large volume of material.
 - [c] Verify if you have a reportable quantity.

8.1.3 Individual Package Listing (IPL)

- [1] The report printout from the spreadsheet obtained in Step 8.1.2 becomes the IPL.

8.1.4 Creating Low-Track Forms

- [1] Create Low-Track forms from the IPL (Envirocare Forms 540, 541, and Isotope Report).

8.1.5 Create Waybill on NS System

- [1] Log into the NS Thoroughbred System.
- [2] Follow the prompts and enter the appropriate information including the following:
- [3] Enter a unique Bill-of-Lading number using a Waste Management

TECHNICAL MANUAL

OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY	MANUAL NO.	PAGE
Procedure for Rail Shipments to Envirocare	306	8	C	MD-81240	6 of 8

sequence number obtained from the Waste Management Transportation Office.

- [4] Enter "Shipper" and company information for CH2M HILL.
- [5] Enter "Description" and the proper shipping name(s). Proper shipping name(s) is/are determined in accordance with Title 49 CFR 171-178 as appropriate by trained and certified shipping personnel.
- [6] Review the Waybill for completeness and accuracy.
- [7] Enter electronic signature and submit form.
- [8] Print Waybill.

8.1.6 Placarding Requirements

- [1] Determine Placarding Requirements and Notify Rail Operations, if applicable.

8.2 Completing the Shipping Paperwork

8.2.1 Complete and Email copies of the following Manifest to Envirocare:

- EC-0230-SNM, *SNM Exemption Certification*
- Form 540, *Uniform Low-Level Radioactive Waste Manifest Shipping Paper*
- Form 541, *Uniform Low-Level Radioactive Waste Manifest Container and Waste Description*
- Isotope Report

NOTE: E-Mail above Manifest forms to manifest@envirocareutah.com

8.2.2 Provide two copies of the Waybill to the Traffic representative:

8.2.3 Prepare Waste Management Shipping Record File containing the following:

- Original ML-9746B, *On-Site Checklist for Gondola Car*

TECHNICAL MANUAL

OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY	MANUAL NO.	PAGE
Procedure for Rail Shipments to Envirocare	306	8	C	MD-81240	7 of 8

- Original *Additional Checklist for Level 2 Security for all LLW Rail Shipments* form
- Copy of Waybill
- IPL (Individual Package Listing)
- Copy of completed ML-9620, *Radiological Survey Data Sheet*
- Copy of Envirocare Forms:
 - EC-0230-SNM, *SNM Exemption Certification*
 - Form 540, *Uniform Low-level Radioactive Waste Manifest Shipping Paper*
 - Form 541, *Uniform Low-level Radioactive Waste Manifest Container and Waste Description*
 - Isotope Report
- Moisture content analysis results will be available upon request and filed with the Shipping Office.

NOTE: Maintain records per DOT Requirements

8.3 Notification

8.3.1 If applicable, prepare and provide Hazard Communications Summary for hazardous material shipments in accordance with SPA990047.

8.3.2 Release railcar per NS billing system (Thoroughbred).

- Access the State of Iowa Department of Transportation website and request a permit for railcars traveling through their state (www.ezpiamcs.state.ia.us)
- Additional checklist for Level 2 Security

[1] Track railcars daily.

[2] NS will notify of any suspicious occurrences.

TECHNICAL MANUAL

OPERATION TITLE	OP. NO.	OP. ISSUE	USE CATEGORY	MANUAL NO.	PAGE
Procedure for Rail Shipments to Envirocare	306	8	C	MD-81240	8 of 8

E-Mail completed EC-98096 (5-Working Day Shipment Notification) form to Envirocare for conformation of Requested Date of Delivery. E-Mail 5-Day Notice to scheduling@envirocareutah.com

NOTE: The Shipment Is Not Scheduled Unless Confirmation By Environcare's Scheduling Department